

## The Tail of the Disappearing Comet

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Many times a year, the night sky is lit up by hundreds of fireballs. You may know these as "shooting stars", but they don't really have anything to do with stars. They are small bits of rock burning up in our atmosphere, which we call "meteors".

Sometimes, meteors rain down on Earth in groups. This is called a "meteor shower".

Meteor showers are caused by comets. Comets are made of space dust, rock and ice. When they travel close to the Sun the heat causes the ice to melt. Small small bits of space dust and rock escape, creating a beautiful glowing tail.

When the Earth travels through the tail of a comet, the particles burn up in our atmosphere as a meteor shower.

One particularly interesting meteor shower is the "Phoenicids" (pronounced "FEE-ni-kids"). The Phoenicids lit up our skies in 1956...and then never returned. Astronomers were left wondering: where did the Phoenicids come from and where did they go?

To find the answer to this, they went in search of a missing comet called Comet Blanpain.

In 1819, two different astronomers discovered Comet Blanpain. Yet, by the end of the year it had mysteriously vanished.

Almost 200 years later, an asteroid was spotted travelling along the same path as the comet. It turns out this was the remains of the long-lost comet!

All the ice, gas and cosmic dust that must have escaped the comet still floats through space as a dust trail. Like the asteroid, it follows the same path the Comet Blanpain once travelled.

When the trail collides with the Earth, the particles light up the sky as the Phoenicid meteor shower!



The material that creates a meteor shower all comes from the same direction in the sky. Most meteor showers are named after the constellation that they seem to come from. But, of course, the stars in the constellation are actually much further away.

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